

Work Order ID 161080***161080***

Page 1

Monday, May 08, 2017 9:19:51 AM

Item ID: D3197-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bar
Start Date: 5/11/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/29/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference: (P.A.)SCHEDULED/S

Approvals: Process Plan: *PA* **DAS** Date: *20170512* Tooling: Date: Run Start ***NR1***
QC: **21** Date: SPC (Y/N): Date: Stop ***NR2***
9-89

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3197	Rev B
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100		0.00							
100	BAND SAW								
Bandsaw	Memo	0.19							
Jeaspa Bandsaw	Cut blanks: 29.125" long								
110		1.27							
110	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.75							
HAAS CNC vertical machine #1	1-Face ends to length per dwg D31972-Machine D3197-1 as per Folio FA340 and Dwg D31973-Debur								
120		0.00							
120	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.02							
Quality Control									

2 *P17-05-13*

2 *P17-05-13*

2 *P17-05-13*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Lathe Conv Conventional Lathe	CONVENTIONAL LATHE Memo Chamfer as per Dwg D3197	0.00 0.33				<u>2</u>			<u>ff 17-05-13</u>
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.04				<u>1</u>	<u>0</u>		DAS 33 9-89 <u>17/05/14</u>
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.23				<u>(x2)</u>	<u>0</u>		<u>20170516</u> <u>BEB</u>

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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
OTHER : ☐									

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per OSI005 4.3 <i>m 136570</i> Memo START TIME: <i>2:35</i> FINISH TIME: <i>8:25</i> OVEN TEMPERATURE: <i>350°</i>	0.00 0.21				<i>2</i>	<i>0</i>	<i>17.05.17.</i>	<i>DA 38 3-89</i>
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.02				<i>2</i>			<i>DA 38 3-89</i> MAY 18 2017
180 *180* Small Fab Small Fab	Small Fab Memo Assemble D3197-041 as per Dwg D3197	0.00 0.34				<i>2</i>	<i>0</i>	MAY 31 2017	<i>DA 18 3-89</i>

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.04				2			DAS 38 9-89 JUN 01 2017
200 *200* Packaging Packaging	Identify as per dwg & Stock Location: SA356 Memo	0.00 0.02				2			JUN 02 2017 DAS 6 9-89
210 *210* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.20							17/6/59 DAS 21 9-89 JUN 02 2017

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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

Picklist Print

Monday, May 08, 2017 9:19:51 AM

Page 1

Work Order ID: 161080

161080

Parent Item: D3197-041

D3197-041

Parent Item Name: Bar

Start Date: 5/11/2017

Required Date: 5/29/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev: A New Issue 05-11-08 JLM
IPP Rev: B As per Rev B 06-03-10 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2690-5		Manufactured	No			180	Each	8.0000	2	4			
D2690-5									**			MAY 3 1 2017	DAS 19 9-89

Lanyard Assembly

Location	Loc Qty	Loc Code
ST009	8	
159057	8	

D3242-1		Manufactured	No			180	Each	25.0000	2	4			
D3242-1									**			MAY 3 1 2017	DAS 19 9-89

Tag

Location	Loc Qty	Loc Code
GA	25	
154878	5	
157274	10	
158463	10	

D3489-3-200		Manufactured	No			180	Each	0.0000	2	4			
D3489-3-200									**			MAY 3 1 2017	DAS 19 9-89

Pip Pin

M7075T73R1.000

Purchased No

M7075T73R1 000

7075-T73 Rd Bar 1.00

Location	Loc Qty	Loc Code
MAT	6.9	
m137041	6.9	
MAT012	36	
m137217	36	

	**		MAY 3 1 2017	DAS 19 9-89
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4.864 8/17-05-13

DQA: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Picklist Print

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Work Order ID: 161080

161080

Parent Item: D3197-041

D3197-041

Parent Item Name: Bar

Start Date: 5/11/2017

Required Date: 5/29/2017

Start Qty: 2.00

Required Qty: 2.00

MS21042L3 Purchased No 180 Each 1,492.000 2 4
MS21042L3 ** MAY 31 2017 DAS 19 9-89
Nut

Location	Loc Qty	Loc Code
FP001	91	
m135945	91	
GA	464	
m134360	102	
M136665	362	
ST303	937	
m137073	11	
m137166	3	
m137321	923	

MS27039-1-24 Purchased No 100 Each 68.0000 2 4
MS27039-1-24 ** MAY 31 2017 DAS 19 9-89
Screw

Location	Loc Qty	Loc Code
ST279	68	
m134537	68	

NAS1149D0363J Purchased No 180 Each 629.0000 6 12
NAS1149D0363J ** MAY 31 2017 DAS 19 9-89
Washer

Location	Loc Qty	Loc Code
GA	42	
m134055	42	
ST263	587	
m137061	100	
m137164	487	

DART AEROSPACE LTD		Work Order:	161080
Description: Bar		Part Number:	D3197-1
Inspection Dwg: D3197	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
29.00	+/-0.030	29.00	✓		tape	
25.06	+/-0.030	25.06			↓	
11.44	+/-0.030	11.44			↓	
0.500	+/-0.010	.500			Jern LPOA	
0.250	+/-0.030	.269			↓	
Ø0.219	+0.005/-0.000	.219			gauge pin	
Ø0.191	+0.005/-0.000	.193			↓	
1.000	+/-0.005	1.000			Jern LPOA	
2.69	+/-0.030	2.685			↓	
1.000	+/-0.010	1.000			↓	
0.300	+/-0.010	.300			↓	
0.063 x 45°	+/-0.010	.063 x 45°			↓	
Ø1.000	+/-0.010	1.000	✓		↓	

Measured by:	PT-05-13	Audited by:	DAS 33 9-89	Prototype Approval:	N/A
Date:		Date:	17/05/14	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue (P/O D3197-041)	KJ/JLM	
B	07.03.09	Dwg revision update	KJ/JLM	BE

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Misidentified ☐	Past Due ☐																																																																

06.07.21 *CP*

DART



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 161080

CHECKED		APPROVED	DRAWING NO.	REV. B
			D3197	SHEET 1 OF 1
DATE		TITLE		SCALE
06.01.10		BAR		1:1
A	03.07.01		NEW ISSUE	
B	06.01.10		CHG PIP PIN; ADD D3242-1 TAG	

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Description Work Order Deviation				Disposition					
{									
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							